

ABSTRACT

A container transportation system and method which includes a number of enclosed containers adapted to contain freight and protect the freight in a marine environment, a vehicle adapted to lift, transport, orient and place the containers on a support surface, a marine vessel having a container storage deck with sufficient strength to support the vehicle when the vehicle is transporting a fully loaded one of the containers, and a ramp shaped to extend from an associated dock to the deck and having sufficient strength to support the vehicle when the vehicle is transporting a fully loaded one of the containers, and having sufficient strength such that an angle of inclination of the ramp suspended between the deck and an associated dock allows the vehicle to traverse the ramp without slipping. The vehicle engages a single one of the containers on the associated dock, then proceeds to transport the container over the ramp to desired, predetermined locations on the deck for transportation by the marine vessel. In a preferred embodiment, the containers include corner castings and the system includes twistlocks which interconnect the corner casings of the containers, and attach the containers to the deck, thereby eliminating the need for lashing and other securing devices. When the marine vessel carrying the containers reaches the port of destination, the process is reversed, with the lifting vehicle removing the containers from a stacked configuration on the deck, transporting them over a ramp extending between the deck and an associated dock, and stacking or otherwise storing the containers on the dock. Also in the preferred embodiment, the vehicle is a reach stacker.